CAPACITIVE LOAD DRIVE RECOVERY CIRCUIT, CAPACITIVE LOAD DRIVE CIRCUIT AND PLASMA DISPLAY APPARATUS USING THE SAME

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ABSTRACT OF THE DISCLOSURE

In the capacitive load drive power supply circuit, a transformer is used, either terminal of the primary coil of the transformer and either terminal of the second coil of the transformer are connected to an output terminal, a first switch circuit is connected between the other terminal of the primary coil and a first reference potential, a second switch circuit is connected between the other terminal of the secondary coil and a second reference potential, and a power supply switch circuit is connected between an output terminal and a drive power supply. Due to the resonance between the capacitance of a drive load and the primary coil of the transformer, the electrostatic energy stored in the capacitance of the drive load is converted into the electromagnetic energy in the exciting inductance of the primary coil of the transformer in as short a time as a quarter of the resonance period.